# Using Online System

TOPIC 3 – ONLINE SYSTEMS

UNIT 1 – INFORMATION TECHNOLOGY SYSTEMS

# Online System

Online systems allow us to access services over the internet.

Two very important modern uses are cloud storage and cloud computing.

Benefit both our home and work lives,

# Cloud Storage

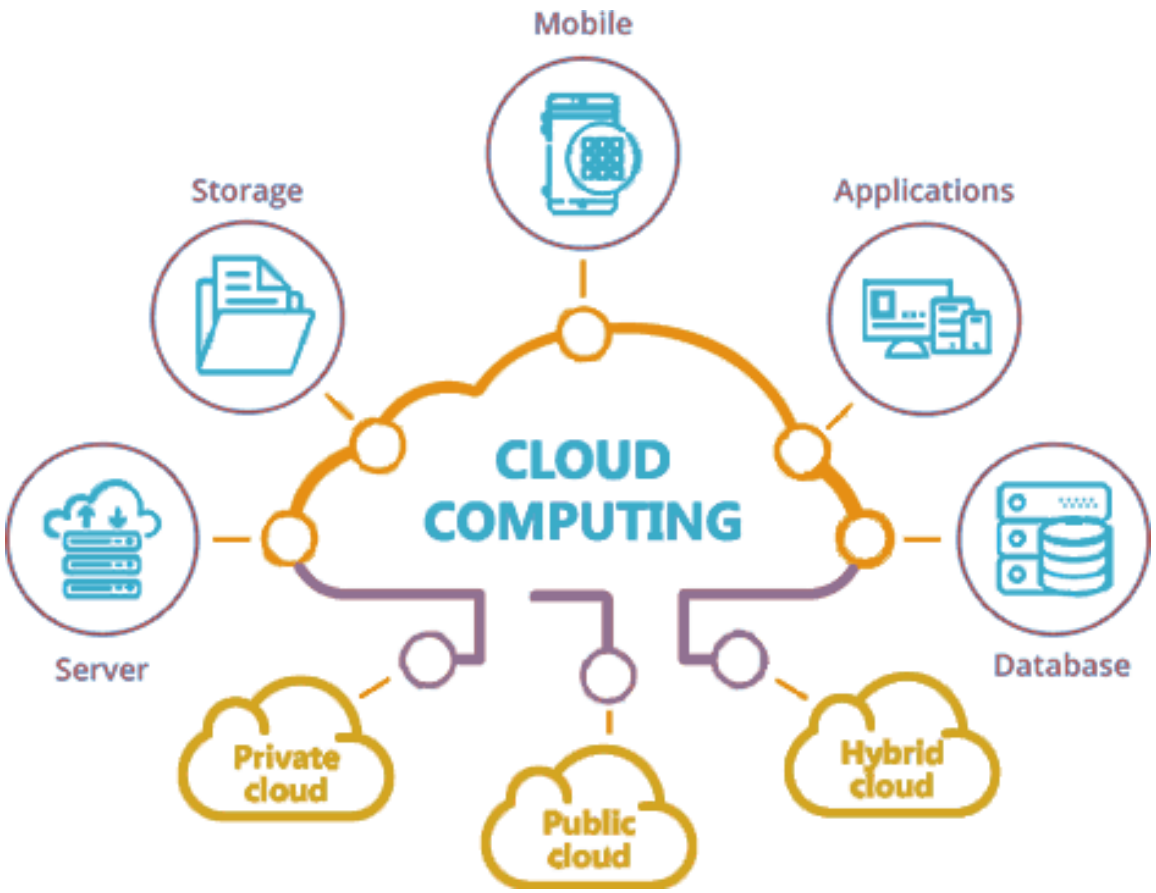
Traditionally we store our files locally, such as on the computers hard disk drive.

Data is stored remotely on servers.

Access your files by logging into the server over the internet.

# Uses

| |
|---|
| **Personal Use** |
| Alternative to portable storage devices (USB Flash Drives, SD Cards etc) |
| Can then be accessed on another computer/device. |
| **Professional Use** |
| Regularly back up their data in case of data loss. |
| It is important for this data to be stored remotely |
| Regularly used by businesses for this purpose. |




# Cloud Computing

Accessing software over the internet by storing it and running it on a server.

Commonly known as Software as a Service (SaaS).

includes more than just software

Refers to accessing the resources (processing, storage) of a server over the internet.

# Uses of Cloud Computing

**Personal Use**

Many home users of computer systems now make use of Cloud Computing to access software applications.

Most notably email and home office software can also be used other types of software e.g. graphics editing software.

**Professional Use**

Businesses will also use cloud computing to access software.

Does not need to be installed on individual computers

# Impact & Implications - individuals

| Benefits | Drawbacks |
| --- | --- |
| •Software and data can be accessed wherever there is an internet connection. Home or on the go | •Security can be a concern. Data is stored online and so hackers may gain access to and misuse files such as photos & videos. |
| •Data can be automatically synced between multiple devices. | •Reliant on having a stable, fast internet connection. |
| •There is reduced concern over the theft of equipment as all data | |

# Impact & Implications – Businesses

| Benefits | Drawbacks |
| --- | --- |
| •There are reduced upfront costs as you don’t need expensive hardware & software is paid on a subscription basis. | •Security can be a concern. Hackers could gain access to private business data. You also have limited control over backups made by the service provider. |
| •Storage capacity & software access is totally flexible to your business. | •The productivity of the business can be harmed due to network outage as data and software would not be accessible to employees. |
| •Businesses need less IT support staff as most maintenance is performed by the cloud service provider. This saves the business money. | |

# Impact & Implications - individuals

| Benefits | Drawbacks |
| --- | --- |
| •Software and data can be accessed flexibly, wherever there is an internet connection. A user could access them from home or on the go. | •Security can be a concern. Data is stored online and so hackers may gain access to and misuse files such as photos & videos. |
| •Data can be automatically synced between multiple devices. A document updated on one computer can be automatically updated on all others. | •Reliant on having a stable, fast internet connection. Accessing services requires internet access & makes heavy use of your bandwidth. |
| •There is reduced concern over the theft of equipment as all data is automatically backed up online and so is easily recoverable. | |

# Impact & Implications – Businesses

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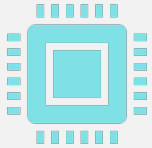
# Online Systems

Online systems allow us to access services over the internet. There are many different kinds of these online systems but two very important modern uses are cloud storage and cloud computing.



These two online systems have benefited both our home and work lives, providing affordable and flexible access to data storage and software.

# Cloud Storage – Personal Use

Cloud storage has become very popular in recent years for personal data storage. Particularly as an alternative to portable storage devices. Rather than saving our documents to a USB Flash Drive or an SD Card, we instead save them to our cloud storage, which can then be accessed on another computer by logging into our cloud storage account.

This is especially useful as we can “sync” our local storage with our cloud storage so that our documents will automatically be uploaded to the cloud storage servers. This way we can always be sure we have access to our most up-to-date files wherever we are.

Another popular personal use is for sharing files such as photos and videos. For example, if you’ve gone on holiday and have taken some pictures and videos that you want to share with family, sending them can be difficult as they’re very large files which normally can’t be sent by email.

By uploading them to cloud storage you can share the files with selected other users, so they can access and download them should they wish to see them.

# Cloud Storage – Business Use

Businesses need to regularly back up their data in case of data loss. It is important for this data to be stored remotely (not in the same location as the original copy of the data). Cloud storage is excellent for this and is regularly used by businesses for this purpose.

This is because with cloud storage files are transferred to and stored on a remote server. We can even have it so our files are automatically synced with the cloud storage so we always have a backup. So if something happened to our business premises, such as a fire, our data would be easily recoverable.

Additionally, more and more often people are working remotely from a business, such as from home, and need to access their work files. Cloud storage will allow users to log in and access their files from wherever they are.

# Cloud Storage - Activity

Do you use cloud storage for your school work or in your personal life?

What do you use it for?

# Cloud Computing – Personal Use

Many home users of computer systems now make use of Cloud Computing to access software applications. Most notably email and home office software such as word processing and presentation software. It can also be used in the home for many other types of software though, such as graphics editing software.

As mentioned, this software runs on a remote server and not the user’s computer. It is accessed through a web browser. This might involve paying a monthly subscription fee, though many services are completely free. Either way, this is often much more affordable than a one-off fee that is common with traditional standalone software.

# Cloud Computing – Business Use

Businesses will also use cloud computing to access software such as email and office software. As cloud-based software does not need to be installed on individual computers this makes it much easier for a business to maintain their software.

This is because it is usually updated and maintained by the cloud computing service provider. Also, should the business expand and require greater processing capabilities and additional software access, they can easily expand by altering their subscription with the provider.

Another reason businesses use cloud computing is for collaborative working. Cloud-based software can often be used to allow multiple users to work simultaneously on the same document, on different computers. This allows employees to work together, even when not in the same building.

# Cloud Computing – Activity

Have you ever used cloud computing?

Can you think of any software that you have accessed through your web browser?

# Impacts and Implications – Personal

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# Impacts and Implications – Activity

Why do you personally use cloud storage or computing?

What benefit does it offer you?

# Online Systems - Summary

- With cloud storage, your data is stored remotely on servers.
- This is used in our personal lives for portable data storage uses syncing files across multiple devices & sharing files with others.
- It is used in our professional lives for remote data backups and remote working.
- Cloud Computing refers to accessing the resources (processing, storage, etc) of a server over the internet.
- We use this in our personal lives for accessing software applications across multiple devices at a low cost.
- It is used in our professional lives for accessing software with low maintenance needs and to support cloud computing.
- The benefit of using cloud storage & computing to individuals is that the software can be accessed flexibly, data can be synced between multiple devices and theft of equipment won’t lose your data.
- The drawback of using cloud storage & computing to individuals is that there can be security concerns and it requires a stable, fast internet connection.
- The benefit of using cloud storage & computing to businesses is that there are reduced upfront costs, access can be flexible to your business needs and less IT staff are required for maintenance.
- The drawback of using cloud storage & computing t